## Kalyani Kansal

Department of Mathematics Johns Hopkins University Baltimore, MD 21211 Email: kkansal2@jhu.edu

Website: https://kalyanikansal.github.io

2016-2023 (expected)

**Education** PhD in Mathematics

Johns Hopkins University Advisor: David Savitt

Bachelor of Medicine and Bachelor of Surgery 2007-2013

Government Medical College, Chandigarh, India

(Equivalent to MD degree in USA)

Past Post-doctoral fellow in Psychiatry 2013-2016

**Employment** Johns Hopkins University School of Medicine

Research Number theory, Arithmetic geometry
Interests

Mathematical K. Kansal. "Codimension one intersections between components of a moduli stack of two-dimensional Galois representations", preprint.

A. Guzman, K. Kansal, I. Kountouridis, B. Savoie and X. Wang. "Smoothness of components of the Emerton-Gee stack for  $GL_2$ ", preprint.

Invited Community building in Langlands Program August, 2022

Talks Bonn, Germany

Ohio State Number Theory Seminar September, 2022

Online

Rice University AGNT Seminar October, 2022

Houston, USA

UCSD Number Theory Seminar November, 2022

San Diego, USA (Upcoming)

Johns Hopkins Junior Number Theory Days December, 2022

Baltimore, USA (Upcoming)

Joint Mathematical Meetings January, 2023

AMS Special Session on Women in Automorphic Forms

Boston, USA (Upcoming)

Essen Number Theory Seminar January, 2023

Online (Upcoming)

Conferences Community building in Langlands Program August, 2022

**Attended** Bonn, Germany

Collaborative Research Workshop
Eugene, USA

Arizona Winter School, Automorphic forms beyond  $\operatorname{GL}_n$ Tucson, USA

MSRI summer school, Toric Varieties
Taipei, Taiwan

Serre conjectures and p-adic Langlands
Padova, Italy

MSRI summer school, Derived Categories
Berkeley, USA

June, 2018

## Selected non-Math Papers

K. Kansal, Z. Yang, A. M. Fishman, H. I. Sair, S. H. Ying, B. M. Jedynak, J. L. Prince, C. U. Onyike. "Structural cerebellar correlates of cognitive and motor dysfunctions in cerebellar degeneration". Brain, 2017.

K. Kansal, M. Mareddy, K. L. Sloane, A. A. Minc, P. V. Rabins, J. B. McGready, C. U. Onyike. "Survival in frontotemporal dementia phenotypes: a meta-analysis". Dementia and geriatric cognitive disorders, 2016.

K. Kansal, D. J. Irwin. "The Use of Cerebrospinal Fluid and Neuropathologic Studies in Neuropsychiatry Practice and Research". Psychiatric Clinics, 2015.

## Teaching Experience

Instructor: Linear Algebra (Summer 2017, 2018), Intro to Calculus (Fall 2021)

TA: Calculus I, II and III, Linear Algebra, Methods of Complex Analysis, Abstract Algebra (various, 2016-2022)